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Contact: Joe Campbell

**WC Docket No. 10-90**

**Ms. Marlene Dortch  
Secretary  
Federal Communications Commission  
445 12<sup>th</sup> St. SW  
Washington, DC 20554**

**March 28<sup>th</sup>, 2014**

**RE: Expression of Interest**

**Dear Ms. Dortch,**

Revo Communications is excited to extend this Expression of Interest. Revo Communications is a last-mile wireless Broadband provider focused on Rural America and currently operating in Cleveland County, North Carolina. The Rural Broadband Experiment would significantly speed up our broadband deployment to serve the under and un-served. Our model has proven to be successful and we are currently working with other counties in North Carolina in effort to help serve their communities.



## **I. Background & Overview**

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Revo Communications was started in January 2013 to address the divide between those who have access to broadband Internet service and those who don't. Our mission is to lead the revolution to end the Digital Divide through our unique methodology of creating a long term sustainable technology solution which connects communities to the internet and provides them with the tools to compete in the digital age.

Since each geographical area has its own set of challenges and obstacles to face, Revo Communications uses a collaborative, multi-technology approach to deliver last-mile Internet service to the end user. Both fiber-optic and wireless technology are being used to deploy the network and the support of business leaders, community leaders, nonprofit organizations, and municipal leaders makes deployment possible. This community involvement and participation is not only needed to be successful but doing so creates a sense of ownership that unites and unifies communities leading to real economic and social growth that is sustainable and measurable.

To date, Revo has been successful in delivering high-speed Internet to the under and un-served areas where quality Internet is not available or affordable in Cleveland County, North Carolina. In addition, Revo has partnered with groups like the Boys & Girls Club of Cleveland County, the United Way of the Greater Triangle, and Kramden Institute to provide children in the National School Lunch Program with computers, digital training and broadband Internet access through completion of High School, all at no charge.

The purpose of this letter is to express interest in the FCC’s Rural Broadband Experiments.

The project can be summarized as follows:

## I. Project Description

Revo Communications seeks to expand broadband infrastructure to anchor institutions, businesses, and home users within the census tracts eligible under the Connect America Fund. The Revo Technology Ecosystem brings a collaborative approach using a combination of incumbent fiber, municipal fiber, and wireless technology for infrastructure. Our long-term sustainable broadband solution involves businesses leaders, community leaders, nonprofit organizations and staple customers. Together we deliver bandwidth needed for education, government, health care institutions and provide free WiFi for public areas and low-income housing neighborhoods.

## II. Expansion Overview

Revo’s Technology Ecosystem is scalable and built for rapid deployment in any rural area. The service area in our proposal may be shaped by the FCC’s RFP. Our intention is to deliver service to these 63 census tracts, in 10 counties, that are in price cap territories. They represent areas adjacent to our current and future geographical coverage area.

| Counties      |             |             |             |             |             |
|---------------|-------------|-------------|-------------|-------------|-------------|
| Census Tracts | Cleveland   | Rutherford  | Chatham     | Pender      | Alamance    |
|               | 37045950101 | 37161960100 | 37037020200 | 37141920203 | 37001021300 |
|               | 37045950102 | 37161960200 | 37037020300 | 37141920204 | 37001021400 |
|               | 37045950200 | 37161960300 | 37037020401 | 37141920300 | 37001021500 |
|               | 37045950301 | 37161960400 | 37037020500 | 37141920401 | 37001021802 |
|               | 37045950602 | 37161960500 | 37037020600 | 37141920402 | 37001021803 |
|               | 37045951400 | 37161960600 | 37037020701 | 37141920403 | 37001021902 |
|               | 37045951502 | 37161960700 | 37037020702 | 37141920501 |             |
|               | 37045951601 | 37161960800 | 37037020800 | 37141920502 |             |
|               |             | 37161960900 |             | 37141920601 |             |
|               |             | 37161961000 |             | 37141920602 |             |
|               |             | 37161961101 |             |             |             |
|               |             | 37161961102 |             |             |             |
|               |             | 37161961200 |             |             |             |

| Counties      |             |             |             |             |
|---------------|-------------|-------------|-------------|-------------|
| Durham        | Orange      | Polk        | Gaston      | Lincoln     |
| Census Tracts | 37063001801 | 37135010801 | 37149920101 | 37071030602 |
|               | 37063001806 | 37135010802 | 37149920103 | 37109070500 |
|               | 37063001900 | 37135011101 | 37149920104 | 37109070600 |
|               | 37063002100 | 37135011102 | 37149920200 |             |
|               |             | 37135011203 | 37149920301 |             |
|               |             | 37149920304 |             |             |

### III. Proposed Technology

We provide high-speed broadband service to each area via IP transport from incumbent or municipal fiber and then deploy wireless technology for the last-mile. Access points would be installed at Anchor Institutions, buildings and water towers.

### IV. Project Objectives

- Provide affordable high-speed broadband service to community anchor institutions, including schools, health care facilities, government buildings, commercial business buildings and non-profit organizations
- Provide affordable high-speed broadband service to residential and business customers
- Provide wireless Internet access to target communities
- Provide no-cost computers, computer training and wireless Internet to children and families who participate in the National School Lunch Program

### V. Project Benefits

#### a. Digital Divide

Revo Communications partnered with the Boys & Girls Club of Cleveland County and the United Way of the Greater Triangle to provide refurbished computers to children in the National School Lunch Program upon completion of a digital literacy course held at Turning Point Academy. Revo Communications also delivers wireless Internet (4x1Mbps) to their homes at no charge until they graduate from high school.

As with the Cleveland County initiative, within each of the proposed census tracts, Revo Communications will work with school districts and local leaders to identify low-income neighborhoods and housing developments to set up similar programs. Providing free computers, computer training and wireless Internet helps bridge the digital divide that can hold back individuals and communities.

## b. Education

With North Carolina public schools moving to digital textbooks by 2017, our solution assures students will be able to connect and schools will be able to fully take advantage of digital resources.



## VI. Project Sustainability

Sustainability is at the core of the Revo business model. In order to create a long term sustainable technology solution in areas that are considered to be unattractive to large telecommunications providers the solution must contain the Technology Ecosystem. The Technology Ecosystem consists of business leaders, community leaders, nonprofit organizations, and municipal leaders. By bringing these four parts of a community together we have proven that you can deploy a network, install end users, and provide ongoing support. The Revo solution is designed to assure long term sustainability.



## VII. Project Cost

Additional analysis is certainly needed. The Revo Communications team will engage each county and identify the assets and collaborative parties that will bring cost savings to each deployment. The following cost breakdown does not take into account what those saving would be, but provides a general estimate of anticipated cost for 100% deployment within the 5 year time frame.

| Project Cost |            |           |                         |
|--------------|------------|-----------|-------------------------|
|              | County     | Tracts    | Cost                    |
|              | Cleveland  | 8         | \$ 1,973,500.00         |
|              | Rutherford | 13        | \$ 3,206,937.00         |
|              | Chatham    | 8         | \$ 1,973,500.00         |
|              | Polk       | 6         | \$ 1,480,125.00         |
|              | Alamance   | 6         | \$ 1,480,125.00         |
|              | Durham     | 4         | \$ 986,750.00           |
|              | Orange     | 5         | \$ 1,233,437.00         |
|              | Pender     | 10        | \$ 2,466,875.00         |
|              | Lincoln    | 2         | \$ 493,375.00           |
|              | Gaston     | 1         | \$ 246,687.00           |
| <b>Total</b> | <b>10</b>  | <b>63</b> | <b>\$ 15,541,311.00</b> |



## **VIII. The Revo Ecosystem Impact on Cleveland County**

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Our impact in Cleveland County has been overwhelming. In just one year we have made a real and measurable difference in our service area. We have received numerous e-mails and letters from individuals, businesses, and municipal leaders thanking us for our efforts and praising our service and support.

We have been praised for our impact on one of the largest economic events in Cleveland County, the American Legion World Series, which we provided 200Mbps of Internet and free WiFi at a cost considerably lower than the incumbent provider.

We have attached some of this feedback so that you may gain a sense of how our model can impact an entire community. We are extremely motivated to continue our mission in leading the revolution to end the Digital Divide, and are confident that our model is a long term solution that addresses the core issues that have kept the large providers and incumbents from confronting the Digital Divide.

## Could all of Cleveland County soon see high-speed wireless Internet?



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**By Jessica Pickens**

*Published: Sunday, July 14, 2013 at 10:56 AM.*

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Many parts of northern Cleveland County are disconnected.

There is undeveloped land that could be used for new businesses.

Students are unable to do homework due to poor Internet connections, or their families can't afford Internet service altogether.

One group hopes to make wireless Internet connectivity available to everyone in the county.

“There are students who don’t have Internet at home and can’t afford it,” said Joe Campbell, of Revo Communications, a company working to provide Internet access to communities without service. “A lot of people in the upper end of the county can’t get a good Internet connection. We want to close that digital divide.”

### **Why Shelby?**

Revo connected with Bryon Gragg, of Shelby-based Gragg & Gragg Financial Planning, to get the project started.

Gragg said rural areas in Cleveland County weren’t receiving Internet access, and Campbell wanted to make a difference.

“This is not a new concept, we just want to prove that it works in the Shelby area,” Campbell said.

Starting in January, Revo began partnering with several uptown businesses. Now they plan to help the Boys & Girls Club of Cleveland County in providing computers and broadband Internet to families who can’t afford them.

Revo teamed with the American Legion World Series to provide high-speed Internet at Keeter Stadium, The Star reported in June. That will serve both fans as well as ESPN3.

There are also plans to give a boost to Uptown Shelby businesses and residential customers.

“We found the most cost-effective technology by using wireless and wire line,” Campbell said.

### **What's being done?**

Homes that qualify are provided with Internet modems. The modems will connect to wireless Internet via antennas placed throughout the county.

So far, antennas have been placed on the top of Gragg & Gragg, the Shelby Police Department and the Cleveland County Sheriff’s Office. Revo is looking for places to locate additional antennas.



"If we can get Internet to the upper end of the county, companies would maybe locate there and bring more jobs to the county," Campbell said.

### **When will it all begin?**

By August, the technology program will start serving children.

"We want to run children through a technology training program at the Boys & Girls Club," Campbell said. "Students will qualify through guidelines similar to the free and reduced lunch program and will be provided with a laptop that has wireless capability."

Revo is talking with Cleveland Community College to assist with the training. Laptops provided for children will be donated from the community.

"The class will probably be a week-long class, but we are going to evaluate as we go," Campbell said. "We are still determining what we need to target in the classes."

A community fund that the public can donate to, the Technology Fund of Cleveland County, was established July 2 to pay for the training classes and Internet installation.

The fund will officially launch at the upcoming 7th Inning Stretch Festival with a raffle. The festival kicks off the American Legion World Series festivities on Saturday, Aug. 10 in uptown Shelby.

After starting in Shelby, Revo Communications hopes to spread the concept to other rural areas of the state and country.

"We want to make this happen, give what Americans want," Campbell said. "We want to start in Shelby and make it spread."

### **What they're saying**

#### **Here's what county leaders said about the Internet connectivity project:**

" There is no doubt that access to fast Internet connections is



necessary for continued growth and development in any community. To the business world it is becoming a critical component of a business's ability to succeed. Providing high-speed Internet access to the rural areas of Cleveland County will prompt residential growth as well as business growth in those areas. I applaud Revo Communications' efforts to supply high-speed Internet service to the underserved areas of Cleveland County."

-Michael Chrisawn , president of the Cleveland County Chamber

"Our schools have good Internet opportunities for students and it's a challenge for the students who don't have Internet at home. There is a number of students who can't do work at home because they don't have the Internet. The Revo program will open up access to a lot of other things as well. Somewhere down the road, the state is having school districts move toward electronic textbooks, and children who don't have Internet access at home will have a difficult time."

-Bruce Boyles , Cleveland County Schools superintendent

"Most of our children come from single-parent homes and can't afford a computer. Some classes require students to print their work off the computer. Students without Internet access can't do their work. We want the children to be successful."

-Jack Weller , president of the Cleveland County Boys and Girls Club



## Shelby Presbyterian Church

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September 19, 2013


Mr. Dave Motz  
Director of Business Development  
Revo Communications  
3715 Neil Street  
Raleigh, NC 27607

Dear Dave,

As the Session of Shelby Presbyterian Church, we would like to express our deep appreciation to you and all those from Revo Communications who helped arrange a temporary upgrade of our service for the Memorial Service for Betsy Martin. With your assistance, along with David Grose and Randy Sweeting, the service was broadcast from our sanctuary to our fellowship hall, chapel, and the sanctuary of Central United Methodist Church. In addition, almost 2500 followed the service on-line. Your support during a time of great sadness in our community is deeply appreciated.

Thank you,

  
John Schweppe III  
Clerk of Session

  
Dr. Luke Harkey  
Pastor



## Feedback from Residential Users

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"I think it's a great program. My kids have really enjoyed having a computer and Internet access in the house to use, both for educational and entertainment purposes." –**Elisha Johnson**

"The kids and I love it! They just recently had a school project and it was wonderful to be able to do the research at home instead of going to the library." –**Kaila French**



## Feedback from Boys & Girls Club

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The children served by the Boys & Girls Club of Cleveland County in many cases come from the most difficult of home situations. 81% of the children are from single parent families and 75% qualify for free or reduced lunches at school. Having access to the Internet and the digital world does not seem to be a priority to families that are making decisions about housing, food, and necessities of life.

Since we partnered with Revo Communications, positive steps are being taken to assist those children who need help the most. By creating the Digital Literacy Training Program, we are able to provide families with computers, digital training and Internet access. Today, because of Revo Communications, the children in this program have access to the Internet through completion of high-school at no cost to them. As of this time, all those children are on the A/B honor rolls at their school. Is there a need to continue? As Revo expands, they challenge us to find the next group of students to go through the program.

For these children, they have had a door opened for them that seemed impossible to unlock. Today, they are part of the digital age -- their futures have been expanded by the collaborative work of Revo Communications and the Boys & Girls Club of Cleveland County. – **Jack Weller, President of Board of Directors, Boys & Girls Club of Cleveland County.**



## Feedback from the American Legion World Series

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"THANK YOU!!!!

"You guys made my life so much better this year. All of the REVO team were amazing and so fun to work with. You just can't image how much I appreciate the work ethic and expertise you guys have brought to this project. Thanks for everything."

**David Grose**  
**ALWS Executive Committee Member**



## Feedback from Business Customers

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"Your support during a time of great sadness in our community is deeply appreciated." -**Luke Harkey, Pastor, Shelby Presbyterian Church**

"I love working with people that are building their relationships with local small business. How could I be any more pleased...faster Internet that's less expensive and oh, by the way, I can call and actually talk with someone quickly. That alone speaks volumes!" -**Holly Brock, Owner, Holly's Flowers**

Revo's Internet Service is great. We love the speed and like knowing we're helping a company that's helping our community." -**Meghan Stout, Owner, LilyBean Microroasted Coffee**

"The speed is incredibly fast and very reliable. I've been very pleased and in turn, recommended it many times." **Paul Ditz, Attorney, Paul Ditz Law Firm**

"I've used Revo at my restaurant and intend on using them to service other additional locations." -**Michael Cheng, Owner, Chen's Restaurant**

This is a very brief summary of some of the successes Revo Communications has achieved since deploying our model in Cleveland County. We look forward to expanding our model in order to serve more counties. We greatly appreciate your efforts in inspiring businesses, entrepreneurs, local government, and citizens to come together and make a difference in the future of our communications infrastructure.

Sincerely,

Joseph Campbell

**CEO, Revo Communications**

**Leading the Revolution to End the Digital Divide**